EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007GH

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
H017D - Double Hinged (A-60)

Issued to
Rapp Bomek AS
Bodø, Norway

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2020/1170,**
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-07-06**.

Issued at **Høvik** on **2021-07-07**

DNV local station:
Norway CMC, East-South

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

"H017D - Double Hinged (A-60)"
is a double leaved hinged door constructed of 1 mm thick steel sheets and insulated with one layer of 60 mm thick "Paroc Marine Slab 220" (density 220 kg/m^3, manufactured by Paroc Group). Seven layers of Supalux boards (density 950 kg/m^3, manufactured by Promat) with a thickness of 9 mm are fitted at the top of the door leaf and 1375 mm down along each vertical side with a width of 150 mm. Silica fibre gasket (Ø20 mm) is fitted along both the vertical edges and at the top of the active door leaf, and along the vertical hinge side edge and at the top of the passive door leaf. The insulation, Supalux boards and the Silica fibre gasket are fixed by means of glue. The passive door leaf is fitted with a flush bolt at the top and bottom.

Total door leaf thickness: 62 mm.

Each door leaf is fixed to the four-sided frame with 4 hinges. The four-sided frame may either be welded or bolted (M8x35, c-c max. 250 mm) to the bulkhead.

The door may be fitted with:
- A window in the upper part of both door leaves with thickness of 27 mm (type Pyrostop 60-201, manufactured by Fire Glass UK Limited). The window frame is made of 1.5 mm thick steel, screwed to the door leaf (M5x35 mm, c-c max. 192 mm) and insulated with "Firemaster Marine Plus".
- A hose port with clear opening 150 x 150 mm fixed to the active door leaf with one hinge and insulated with 60 mm thick "Paroc Marine Slab 220". Silica fibre gasket is fitted on all four edges of the hose port.
- Door closing device in the upper corner of both door leaves.

For further details, see drawings listed under Type Examination documentation.

Application/Limitation

The door is approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum size of active door leaf:	1047 x 2336 mm (W x H)
Maximum size of passive door leaf:	1067 x 2336 mm (W x H)
Maximum clear opening door:	1980 x 2300 mm (W x H)
Maximum clear opening window:	400 x 600 mm (W x H)

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

Each door is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report No. 150071-40 dated 11 May 2021 from RISE, Trondheim, Norway.

Drawing No. RB604151, Rev.3, dated 20 January 2021 from maker.
Drawing No. "Vindu" dated 12 February 2021 from maker.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The door has been successfully tested for extended test period of 68 minutes.

Marking of product

The product is to be marked with name and address of the manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG Approval Number if relevant (see front page).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. For larger windows, USCG shall be contacted.